INT PNATIONAL SEARCH REPORT

ternational Application No PCT/JP 00/06831

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H02K5/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ll} \text{Minimum documentation searched (classification system followed by classification symbols)} \\ IPC 7 & H02K \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Α	US 4 836 792 A (GLOVER ALFRED H) 6 June 1989 (1989-06-06) abstract; claims 1,5; figures 1-4	1-5, 11-15
Α	EP 0 511 876 A (MABUCHI MOTOR CO) 4 November 1992 (1992-11-04) column 3, line 55 -column 4, line 1 column 4, line 55 -column 5, line 17; claim 1; figures 1,3,5-7,9-11	1-6,9-16
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 460 (E-1419), 23 August 1993 (1993-08-23) -& JP 05 103451 A (NIPPON DENSAN CORP), 23 April 1993 (1993-04-23) abstract; figures 1,3-5 -/	1-4,7,8, 11-15

X Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.
 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed 	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search 31 January 2001	Date of mailing of the international search report 07/02/2001
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer von Rauch, E

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INTERNATIONAL SEARCH REPORT

International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT					
Category °			Relevant to claim No.		
A	WO 99 41020 A (KAWABATA SEIJI ;SEIKO EPSON CORP (JP)) 19 August 1999 (1999-08-19) abstract; figures 1,2,5		3-8,15, 16		
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INTERNATIONAL SEARCH REPORT

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international Application No PCT/JP 00/06831

Publication Publication Patent document Patent family cited in search report date member(s) date 06-06-1989 US 4836792 Α NONE 69209710 D 15-05-1996 EP 0511876 Α 04-11-1992 DE DE 69209710 T 31-10-1996 US 5221130 A 22-06-1993 JP 05103451 A 23-04-1993 NONE 24-08-1999 WO 9941020 Α 19-08-1999 JP 11226501 A